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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,585	02/19/2004	Herve Marche	034299-567	7714

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EXAMINER

GARCIA, ERNESTO

ART UNIT	PAPER NUMBER
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3679

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/783,585

Applicant(s)

MARCHE, HERVE

Examiner

Ernesto Garcia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-5, 7-15 and 17-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20 and 21 is/are allowed.
- 6) ☒ Claim(s) 2-5, 7-15 and 17-19 is/are rejected.
- 7) ☒ Claim(s) 2, 4, 5 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date: _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 5, 2007 has been entered.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "horizontal axis" (claim 19, line 3) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended". If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: "a first axis along a horizontal axis" recited in claim 19, lines 2-3, and "a second axis along a horizontal axis" recited in claim 19, lines 7-8.

Claim Objections

Claims 19-21 are objected to because of the following informalities:

regarding claim 19, "a horizontal axis" in line 8 should be --the horizontal axis-- that is recited in line 3;

regarding claims 20 and 21, line 9, "first part" should be --first parts--;

regarding claims 20 and 21, line 12, "palrts" and "eh" are misspelled and "suspend" should be --suspended--;

regarding claims 20 and 21, line 13, "spehericial" is misspelled; and,

regarding claim 21, "formring" in line 15 and "surfacews" in line 17 are misspelled. Appropriate correction is required. For purposes of examining the instant invention, the examiner has assumed these corrections have been made.

Claim Rejections - 35 USC § 112

Claims 2, 4, 5, 7, 8, 14, 15, 17, and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 2, the recitations "the hinge pin" in line 2 and "the first and second parts" in lines 2-3 lack proper antecedent basis.

Regarding claim 4, "the two first parts" in line 2 lacks proper antecedent basis.

Regarding claims 7 and 8, "the first structure" in line 2 lacks proper antecedent basis.

Regarding claim 14, the recitation "the first structure" in lines 2 and 4 lack proper antecedent basis.

Regarding claim 15, "the first and second structures" in line 3 lack proper antecedent basis.

Regarding claims 17 and 18, the recitation that "the second axis is offset vertically upwards from the first axis" in line 2 is redundant since claim 19, line 15, already recites this feature.

Regarding claim 5, the claim depends from claim 4 and therefore is indefinite.

Claim Rejections - 35 USC § 102

Claims 3, 7-11, 14, and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Reilly et al., 5,779,260.

Regarding claim 19, Reilly et al., disclose, in Figure 2, an assembly comprising a load bearing structure **21**, a suspended structure **19**, and a coupling member **11**. The load bearing structure **21** has a first circular member **14**. The first circular member **14** is

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able to rotate about a first axis **A1** (see marked-up attachment) along a horizontal axis **A2**. The first circular member **14** has a first aperture **A3**. The suspended structure **19** has a second circular member **15** rotatable about a second axis **A4** along the horizontal axis. The coupling member **11** has a second aperture **A5**. The coupling member **11** is received in the first aperture **A3** and the second aperture **A5**. The coupling member **11** is oriented along a third axis **A6** parallel and adjacent to the first axis **A1** and the second axis **A4**. The first circular member **14** and the second circular member **15** are unable to rotate with respect one another about the third axis **A6** (note that the suspended structure and the load bearing structure are not pivotable but fixed thus the circular members are not rotatable). The second axis **A4** is offset vertically upwards from the first axis **A1**.

Regarding claim 3, the suspended structure **19** further comprising two plates **19** parallel to each other between which the load bearing structure **21** is placed.

Regarding claim 7, the suspended structure **19** is capable of rotating about at least one of the first axis **A1** and the second axis **A4**.

Regarding claim 8, the load bearing structure **21** is capable of rotating about at least one of the first axis **A1** and the second axis **A4**.

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Regarding claim 9, the first circular member **14** and the second circular member **15** are not independently moveable (note that since the bolt provides for a permanent connection, nothing moves).

Regarding claim 10, the coupling member **11** is a circular hinge pin **11**.

Regarding claim 11, the first aperture **A3** and the second aperture **A5** are circular.

Regarding claim 14, as best understood, the suspended structure **19** further comprises two plates **19** parallel to each other defining a space therebetween. The load bearing structure is positioned between the two plates.

Regarding claims 17 and 18, the second axis **A5** is offset vertically upwards from the first axis **A1**.

Claim Rejections - 35 USC § 103

Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reilly et al., 5,779,260, in view of Muller, 3,526,413.

Regarding claim 12, Reilly et al., as discussed, fails to disclose the circular hinge pin further comprising at least one protrusion extending from an outer surface. Muller suggests in column 3, lines 58-63 that the hinge pin, i.e., the bolts 22, are non-rotatable connected with second circular members 21 with a key or nose portion 23 “made in one piece with the eccentric disk 21 or inserted into the same”, i.e., meaning the key is inserted into the eccentric disk 21, which inherently places the key in the hinge pin. Therefore, as taught by Muller, it would have been obvious to one of ordinary skill in the art at the time the invention was made to place at least one protrusion extending from an outer surface of the hinge pin of Reilly et al. to provide a non-rotatable connection with the second circular member.

Regarding claim 13, Reilly et al., as discussed, fails to disclose the aperture of at least one of the first circular member **14** and the second circular member **15** includes a protrusion extending from an inner surface. Muller teaches, in Figures 2-3, a protrusion **23** extending from a second circular member **21** to make the second circular member non-rotatable with a coupling member **22** (col. 3, lines 58-63). Therefore, as taught by Muller, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the second circular member **15** with a protrusion extending from an inner surface to make the second circular member **15** non-rotatable with the coupling member of Reilly et al.

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respect to the axis of the hinge pin axis thus the axis will not be offset from the hinge pin axis (claim 1, lines 8-9);

regarding claim 15, the prior art of record does not disclose or suggest an assembly comprising a first circular member and a second circular member include a spherical outer surface to define a ball joint connection with corresponding interface surface (lines 2-3) in combination with a first circular member rotatable about a first axis along a horizontal axis (claim 19, lines 2-3) and unable to rotate with respect to a second member about a third axis (claim 19, lines 14-15);

regarding claims 20 and 21, the prior art of record does not disclose or suggest an articulated junction device comprising first parts and a second part having one rotatable degree of freedom that is fixed along a hinge pin axis (lines 10-11) in combination with the first parts cooperate with plates in a suspended structure through spherical surfaces to define a ball-joint connection therebetween (lines 12-13). The closest prior art, Coone, 4,225,264, teaches the ball joint connection in Figure 4; however, there is no motivation, absent applicant's own disclosure, to teach the rotatable degree of freedom fixed along the hinge pin axis since the hinge pin axis required rotation; and,

regarding claim 5, this claim depends from claim 4.

Response to Arguments

Applicant's arguments with respect to claim 19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernesto Garcia whose telephone number is 571-272-7083. The examiner can normally be reached from 9:30-6:00. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached at 571-272-7087.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

E.P.



E.G.

March 22, 2007

Attachment: one marked-up page of Reilly et al., 5,779,260

DANIEL P. STODOLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3800

Reilly et al., 5,779,260

